IN THE SPECIFICATION

References in this section to amendments to page and line numbers in the specification refer to the Substitute Specification submitted in the response to the prior Official Action.

Please replace the paragraph beginning at page 9, line 11 with the following rewritten paragraph:

-- In order to transform the geometry of a shape by an arbitrary function, the functions and positions underlying the existing geometry are simply composed with the transformation function f(x,y,z). For example, if one of the surfaces of the shape can be described by the surface function

$$s1(u,v) = \begin{bmatrix} x(u,v) \\ y(u,v) \\ z(u,v) \end{bmatrix},$$

and the transformation function f is defined as f(x,y,z)= (x'(x), y'(y),z'(z)), the new surface function sf1 will be defined as:

~~$$f \bullet s1(x,y,z) = \begin{bmatrix} x'(x(u,v)) \\ y'(y(u,v)) \\ z'(z(u,v)) \end{bmatrix}$$~~

$$f \bullet s1(u,v) = \begin{bmatrix} x'(x(u,v)) \\ y'(y(u,v)) \\ z'(z(u,v)) \end{bmatrix}.$$--

Please replace the paragraph beginning at page 10, line 1 with the following rewritten paragraph:

--Similarly, if one of the curves of the shape can be described by the curve function c1

$$c1(t) = \begin{bmatrix} x(t) \\ y(t) \\ z(t) \end{bmatrix},$$

the new curve function cf1 will be defined as:

$$f \bullet c1(u,v) = \begin{bmatrix} x'(x(t)) \\ y'(y(t)) \\ z'(z(t)) \end{bmatrix}$$

$$f \bullet c1(t) = \begin{bmatrix} x'(x(t)) \\ y'(y(t)) \\ z'(z(t)) \end{bmatrix}.--$$

Please replace the abstract beginning at page 16, line 3, with the following rewritten abstract:

--Methods for the transformation of shapes in Computer Aided Design (CAD) applications applying a general function composition mechanism. This method allows the geometry of a shape expressed in terms of surface and curve functions and positions to be transformed by any generic function while maintaining the topography of the shape. ~~To~~

~~enable this transformation, the underlying geometry of a shape must either be expressed in terms of surface and curve functions and positions underlying the faces, edges and vertices respectively of the shape, or be capable of being converted into such a representation.~~ Once the underlying geometry of the shape has been represented as a set of functions and positions, the functions and positions are composed with a transformation function to define new surface and curve functions. Once the new functions and positions have been created, the geometry of the transformed shape can be found by passing each point in the domain of each original geometry function through the new transformed function. This shape may then be displayed to the user, and the steps of this method repeated for refinement of the transformation function.--